

UNITED STATES PATENT AND TRADEMARK OFFICE

UNIDED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,210	02/06/2006	Jonathan Mark Hardy	056258-5106	2342
9629 7590 01/10/2007 MORGAN LEWIS & BOCKIUS LLP				INER
	LVANIA AVENUE NV		COPPINS,	
WASHINGTON, DC 20004			ART UNIT	PAPER NUMBER
			1626	
		·		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	01/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)	<u></u>			
Office Action Summary		10/539,210	HARDY ET AL.				
		Examiner	Art Unit				
		Janet L. Coppins	1626				
Period fo	The MAILING DATE of this communication or Reply	n appears on the cover sheet	with the correspondence ac	idress			
WHI(- Exte after - If NO - Failt Any	ORTENED STATUTORY PERIOD FOR R CHEVER IS LONGER, FROM THE MAILIN nsions of time may be available under the provisions of 37 CI SIX (6) MONTHS from the mailing date of this communicatio period for reply is specified above, the maximum statutory p ire to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	IG DATE OF THIS COMMUINTER 1.136(a). In no event, however, may be not	NICATION. a reply be timely filed ONTHS from the mailing date of this c ABANDONED (35 U.S.C. § 133).				
Status							
1)[汉]	Responsive to communication(s) filed on	06 February 2006					
2a)□	·	This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
-,	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims		,				
4)	Claim(s) <u>1-15</u> is/are pending in the applica	ation		•			
.,,	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)□	Claim(s) is/are allowed.						
· —	Claim(s) <u>1-8,10,11,13 and 14</u> is/are rejected.						
	Claim(s) 9.12 and 15 is/are objected to.						
· —	_						
Applicat	ion Papers						
_		minor					
9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)	The oath or declaration is objected to by the			• •			
	ınder 35 U.S.C. § 119						
12)🛛	Acknowledgment is made of a claim for for	reign priority under 35 U.S.C	. § 119(a)-(d) or (f).				
a)	a)⊠ All b)□ Some * c)□ None of:						
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage						
	application from the International Bu						
* 5	See the attached detailed Office action for a	a list of the certified copies no	ot received.				
Attachmen	` '						
	e of References Cited (PTO-892)	4) Interview	v Summary (PTO-413)				
	e of Draftsperson's Patent Drawing Review (PTO-948 nation Disclosure Statement(s) (PTO/SB/08)		o(s)/Mail Date f Informal Patent Application				
	No(s)/Mail Date	6) Other: _	, .				

Application/Control Number: 10/539,210 Page 2

Art Unit: 1626

DETAILED ACTION

1. Claims 1-15 are pending in the instant application.

Priority

2. The instant application is a 371 of PCT/GB03/05473, filed December 16, 2003.

Information Disclosure Statement

3. Applicant's Information Disclosure Statements (IDS), submitted June 17, 2005 and October 28, 2005 have been considered by the Examiner. Please refer to the signed copies of Applicants' PTO-1449 forms, attached to the instant Office Action.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-8, 10, 11, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamamoto et al, Chemistry Letters, 1986. The Hamamoto et al journal article teaches the preparation of a phosphorous amide compound (see "3a-f"), which is the same as the instantly claimed process of preparing compounds according to the formula R¹-Y¹-P(NR²R³)₂. The Hamamoto document teaches the reaction of a trichlorophosphine (the same as Applicants' "PX₃") with a di-isopropylamine (the same as Applicants' "HN-R²R³") to form a bis(diisopropylamino)chloro-phosphine (the same as Applicants' "X-P(NR²R³)²") which is then reacted with an alcohol, R-OH (same as Applicants' "R¹-Y¹-H"), in a trialkylamine base such as Et₃N, under anhydrous conditions (please refer to the reaction schemes on page 1402).

Application/Control Number: 10/539,210 Page 3

Art Unit: 1626

6. Claims 1, 2, 7, 8, 10, 11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 62-212395. The JP document teaches the preparation of a phosphorous amide compound, R³-O-P(NR²N³)₂, which is the same as the instantly claimed process of preparation of instant claim 1. The JP document teaches the reaction of a trihalophosphine (the same as Applicants' "PX₃") with a di-isopropylamine (the same as Applicants' "HN-R²R³") to form a bisaminomonohalogenphosphine (the same as Applicants' "X-P(NR²R³)₂") which is then reacted with an alcohol, R₃-OH (same as Applicants' "R¹-Y¹-H") in bases such as Et₃N, under anhydrous conditions.

7. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Wilk et al,
Tetrahedron Letters, 2001. The Wilk et al journal articles teaches the preparation of a
phosphorous amide compound, "2", which is the same as the instantly claimed process of
preparation of instant claim 14. The JP document teaches the reaction of a
bis(diisopropylamino)chlorophosphine (the same as Applicants' "X-P(NR²R³)₂") with a
protected alcohol, compound "1," (same as Applicants' "R¹-Y¹-H") in a hydrocarbon solvent
such as benzene, under anhydrous conditions.

Claim Objections

8. Claims 9, 12, and 15 are objected to as being dependent on rejected base claims.

Conclusion

9. In conclusion, claims 1-15 are pending, claims 1-8, 10, 11, 13, and 14 are rejected, and claims 9, 12, and 15 are objected to.

Page 4

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet L. Coppins whose telephone number is 571.272.0680. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on 571.272.0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Janet L. Coppins January 8, 2007

SPE, Art Unit 1626